

ABSTRACT OF THE DISCLOSURE

This invention is to provide a radiation image sensing apparatus capable of automatically adjusting an incident radiation dose without requiring high-speed driving while suppressing any attenuation of the radiation before detection, and a method of manufacturing the same. To accomplish this, a read TFT (1) is formed on an insulating substrate (11). The semiconductor layer (19) and n⁺-semiconductor layer (20) of an MIS photoelectric conversion element (2) are formed on a second insulating layer (18) that covers the read TFT (1) to be aligned with source and drain electrodes (16) functioning as lower electrodes. The semiconductor layer (21) of a TFT sensor (3) is formed to be aligned with a gate electrode (17) when viewed from the upper side. The semiconductor layers (19, 21) are formed from the same layer. The upper electrode (22) of the MIS photoelectric conversion element (2) is formed on the n⁺-semiconductor layer (20). Two ohmic contact layers (23) are formed on the semiconductor layer (21). Source and drain electrodes (24) are formed on the two ohmic contact layers (23), respectively.